immobilized thereon, and the immobilization may employ any method known to a person skilled in the art. The solid phase having immobilized on the support thereof various types of materials may be suitably used for various types of antigen-antibody reaction, nucleic acid hybridization, receptor assay, biosensor, etc. employing the solid phase.

As hereinbefore described, in accordance with the present invention, an immobilization support having excellent immobilizing ability and stability can be fabricated by a very simple procedure, and a solid phase having excellent characteristics is provided.

In accordance with the immobilization support of the present invention, by coating the surface of a substrate of the immobilization support with an electrolyte thin film, it becomes possible for a target material to be immobilized on the coated support surface efficiently with good reproducibility, and there are provided an immobilization support having excellent characteristics and a solid phase employing same.

Examples

The present invention is explained in detail below by way of Examples, but the present invention should not be construed as being limited by the Examples below.

(Example 1)

A 96-well microplate was immersed in an aqueous polyacrylic acid solution (concentration 10^{-2} M) at 25°C for 15 minutes, and then washed with water. During this process, the pH of the aqueous polyacrylic acid solution was maintained at 3.5. Separately, a solution was prepared by adding

Claims

1. An immobilization support comprising an electrolyte thin film provided on the surface of the support.

2. The immobilization support according to Claim 1 wherein the electrolyte thin film comprises a macromolecular material.

3. The immobilization support according to Claim 2 wherein the electrolyte thin film comprises either a polyanionic thin film or a polycationic thin film.

4. The immobilization support according to Claim 2 wherein the electrolyte thin film is formed by alternately layering a polyanionic thin film and a polycationic thin film.

5. The immobilization support according to any one of Claims 1 to 4 wherein the immobilization support is used for immobilizing a material that binds to a substance to be detected or a material that has an affinity therefor.

6. The immobilization support according to any one of Claims 1 to 5 wherein the immobilization support is used for immobilizing a biologically-derived material such as a protein, a glycoprotein, a peptide, a glycopeptide, a polysaccharide, a nucleic acid, a lipid, or a glycolipid, a cell, or a material that binds thereto or a material that has an affinity therefor.

7. A solid phase wherein a material that binds to a substance to be detected or a material that has an affinity therefor is immobilized on the immobilization support according to any one of Claims 1 to 4.

8. A solid phase wherein a biologically-derived material such as a protein, a glycoprotein, a peptide, a glycopeptide, a polysaccharide, a nucleic acid, a lipid, or a glycolipid, a cell, or a material that binds thereto or a material that has an affinity therefor is immobilized on the immobilization support according to any one of Claims 1 to 4.